

No. 781,292.

PATENTED JAN. 31, 1905.

J. M. MURPHREE.

MOUTH BRUSH.

APPLICATION FILED APR. 23, 1904.

Fig. 1.

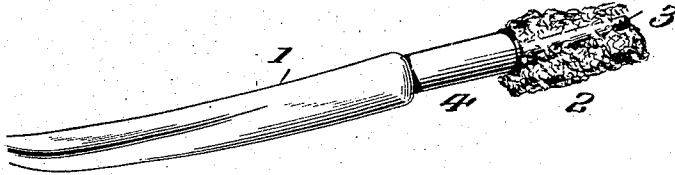


Fig. 2.

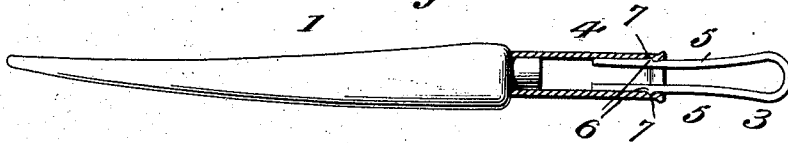


Fig. 3.

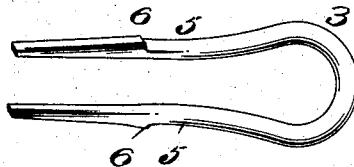
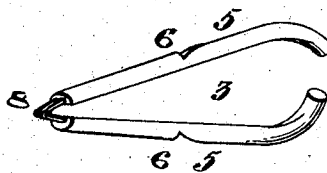


Fig. 4.



Inventor

J. M. Murphree

Witnesses

J. M. Murphree
W. A. Woodson

By

R. A. Macy, Attorneys

UNITED STATES PATENT OFFICE.

JAMES M. MURPHREE, OF DOTHAN, ALABAMA, ASSIGNOR OF ONE-HALF
TO HANSFORD D. BOYD, JR., OF TROY, ALABAMA.

MOUTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 781,292, dated January 31, 1905.

Application filed April 23, 1904. Serial No. 204,658.

To all whom it may concern:

Be it known that I, JAMES M. MURPHREE, a citizen of the United States, residing at Dothan, in the county of Houston and State of Alabama, have invented certain new and useful Improvements in Mouth-Brushes, of which the following is a specification.

This invention provides a novel form of mouth-brush particularly adapted for use for cleaning teeth and gum-massage purposes, relating primarily to peculiar means whereby the massaging device is secured to the handle of the article.

Specifically, my brush consists of a manipulating handle of special form, the brush element or massaging device carried by said handle, and the securing member by which the massaging device is attached to the handle, the latter comprising the essential feature of my invention.

The securing member above mentioned is so mounted upon the handle of the article as to be susceptible of ready detachment or attachment, so as to admit of removal of the brush element or cleansing device for any purpose which may be necessary in the actual use of the invention.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a brush device embodying my invention. Fig. 2 is a horizontal longitudinal sectional view showing more clearly the manner of attaching the massaging device or brush element proper. Fig. 3 is a detail perspective view of the securing member by which the massaging device is held in position. Fig. 4 is a view similar to Fig. 3, showing a modified form of securing member for holding the massaging or cleansing device.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

As is well known, it is very desirable in the use of brushes of any form that the brush element be removable either to admit of a thorough drying of the same if it has been wet in the use of the brush, so as to prevent rotting thereof, or to admit of detachment of the old brush element and use of a new one in its stead. When the brush element may be readily removed in a manner just above mentioned, it will be seen that the handle and securing parts need not be reproduced, but are susceptible of use with any number of brush elements, thereby saving expense arising from the necessity of buying a new article entire.

It is with the above and other objects and advantages in view that I have constructed my invention, and in its preferred form the same consists, specifically, of three essential parts—a handle 1, the brush element 2, which constitutes the cleansing or massaging device proper; and the securing member 3. The handle 1 may be of any form admitting of ready grasping thereof in the operation of the brushing device and is made tubular at one end, as shown at 4. The tubular portion of the brush may be constructed integral therewith or otherwise, as found most suitable in the practical manufacture of the article. This tubular portion aforesaid coöperates to rigidly attach the brush element 2 to the handle. The brush element 2 may be made of suitable material—such as brush fiber, sponge-rubber, or the like—and is engaged by the securing member 3 when fastened to the handle. The securing member 3 is of a peculiar structure, being of U form, preferably, and having spaced arms 5. The spaced arms 5 are adapted to embrace the brush element 2 upon opposite sides and by a binding engagement therewith to rigidly secure the same to the handle 1. Each of the spaced arms 5 of the securing member 3 are provided with engaging means or engaging members 6 in the form of integral projections laterally

extended therefrom, which projections are adapted to engage in an annular groove 7 or similar part provided upon the inner periphery of the tubular portion 4 of the handle.

5 The spaced arms 5 of the securing member 3 are adapted for a spring movement toward and from each other, the normal tendency of said arms being to spring away from each other. The inner ends of the arms 5 are adapted to be

10 received within the tubular portion of the handle 1 to admit of engagement of the projections 6 in the groove portions 7 of the part 4. When engaged in the groove, the projections are normally held in such engagement by the spring action of the arms 5 and

15 firmly prevent accidental displacement of the brush element 2 from the handle. This brush element 2, however, may be quickly and easily detached for any of the purposes which

20 have been before pointed out by slight operation of the arms 5 to disengage the projections or engaging members 6 from the tubular portion of the handle 1. The securing member 3 is adapted to embrace the brush

25 element 2 about centrally of the upper and lower portions thereof, and this is of no small advantage in that either the upper or lower portions of the brush element may be utilized as a rubbing or cleaning portion.

30 Again, the element 2 may engage the brush element nearer the upper portion thereof than the lower portion, and thereby the degree of flexibility of such portions may be varied, dependent upon the location of the member 3 aforesaid.

35 The brush, as above described, is very simple in construction and operation and may be manufactured at a comparatively inexpensive price, at the same time being capable of rendering a maximum degree of service as regards the length of its use.

Though my invention may be used for cleansing the teeth, it is primarily designed for massaging the gums of the mouth, and in this capacity it will be readily seen that it is particularly advantageous, the massaging or

45 cleansing device being detachable, especially for the purpose of cleaning the same. When the device is used for massaging purposes, the part 2 is preferably made of sponge-rubber, and this part may be either used alone or in connection with antiseptic solutions, as found best for treatment of the diseased gums, as the case may be.

55 The modified form of the securing member embodied in Fig. 4 shows the spaced arms 5^a of separate formation and not integral, as illustrated in Fig. 3. These arms are connected at one end by a spring member 8, which is

preferably made of silver wire or of metal 60 which is not likely to rust. The spring element 8 affords a strong connection between the arms 5^a and clamps the massaging or cleansing device firmly in holding the latter in position. The arms 5^a of the modified construction of the securing member 3 are curved 65 inwardly at their outer ends and are provided with projecting portions 6, as hereinbefore described with relation to this part, which portions 6 are designed to cooperate with the groove 7 in the tubular part 4 in a manner clearly set forth. 70

There is nothing about my brush which is likely to tarnish or rust, and the structure of the device is designed so as not to be deleterious to the health of the person using same 75 in any manner whatsoever, which is of no small importance in an article of the class to which my invention relates.

Having thus described the invention, what 80 is claimed as new is—

1. In a mouth-brush, the combination of a handle, a cleansing device, a securing member comprising spaced spring-arms engaging the 85 cleansing device, and engaging members projected from the spring-arms aforesaid into positive interlocking engagement with the handle.

2. In a mouth-brush, the combination of a handle provided with a tubular portion having 90 an annular groove upon the inner periphery thereof, a brush element, a securing member composed of spaced arms curved inwardly at their outer ends and embracing the brush element aforesaid, a spring connecting the inner 95 ends of the spaced arms aforesaid, and projections extended from the spaced arms between the ends thereof and interlocking with the groove in the tubular portion of the handle aforesaid. 100

3. In a mouth-brush, the combination of a handle provided with a tubular portion having an annular groove upon the inner periphery thereof, a brush element, a spring securing 105 member having spaced spring-arms partially received in the tubular portion of the handle, said securing member engaging the brush element aforesaid, and projections extended from the spring-arms of the securing member between the ends of said arms and interlocking 110 in the grooved portion of the tubular portion of the handle.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES M. MURPHREE. [L. s.]

Witnesses:

ROBT. BOYD,
S. O. SMITH.